

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRST0-I022-00(010)	142	228

BRIDGE CONSISTS OF

2 - 77'-0" TYPE III PSC BEAM SPANS ----- SPECIAL DESIGN
1 - 140'-0" BULB TEE, 74 IN, PSC BEAM SPAN ----- SPECIAL DESIGN
2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
2 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(L = 4'-0"; W = 1'-1"; H = 2'-8")

BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)

TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ----- 477 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	29000 CFS	8.11 FPS	3577 SQ FT	0.74 FT
100 YEAR	33200 CFS	8.64 FPS	3841 SQ FT	0.98 FT
500 YEAR	43800 CFS	9.93 FPS	4417 SQ FT	1.66 FT

TRAFFIC DATA

TRAFFIC ----- ADT = 7,700 (2015)
ADT = 12,000 (2035)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 8.5 %

24 HR TRUCKS ----- 13 %

DIRECTIONAL ----- 60 %

UTILITIES

16 INCH WATER MAIN ----- CHEROKEE COUNTY WATER AUTHORITY

GENERAL NOTES

△ SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2013 EDITION, AS MODIFIED AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

TEMPORARY SHORING - INCLUDE THE COST OF TEMPORARY SHORING AS NECESSARY FOR BRIDGE CONSTRUCTION IN THE OVERALL BID SUBMITTED.

TRAFFIC CONTROLS - SEE ROADWAY PLANS FOR TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX

THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER BA(4)PR604(10).

WAITING PERIOD - NONE REQUIRED.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

PILE POINTS - REINFORCE ALL PILE TIPS AT BENT 1 IN ACCORDANCE WITH SECTIONS 520 AND 855 OF THE GEORGIA DOT SPECIFICATION.

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT BENT 4.

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

WATER/SEWER MAIN HANGERS - PIPE ROLL SUPPORT ASSEMBLIES AND KEEPER STRAPS SHALL BE FURNISHED AND INSTALLED BY THE UTILITY OWNER. FURNISH AND INSTALL ALL OTHER COMPONENTS OF HANGER ASSEMBLIES AND INCLUDE THE COST IN THE OVERALL BID SUBMITTED.

STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1 1/2" AT BENT 1. SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.

HIGH PERFORMANCE CONCRETE (HPC) - PRESTRESSED CONCRETE BEAMS FOR SPAN 2 OF THIS BRIDGE UTILIZE HIGH PERFORMANCE CONCRETE. SPECIAL REQUIREMENTS ARE REQUIRED AS DETAILED IN SPECIAL PROVISION SECTIONS 500 AND 865. HPC BEAMS WILL BE PAID FOR AS "PSC BEAMS".

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

DESIGN DATA

SPECIFICATIONS ----- AASHTO 17TH EDITION, 2002
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY B)

TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS AA, $f_c = 3,500$ PSI
BARRIER ----- CLASS AA, $f_c = 3,500$ PSI
PSC BEAMS ----- CLASS AAA, $f_c =$ SEE BEAM SHEETS
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS
SUBSTRUCTURE ----- CLASS AA, $f_c = 3,500$ PSI

REINFORCEMENT STEEL: ----- GRADE 60, $f_y = 60,000$ PSI


PRETENSIONING STRANDS: ----- $f_s = 270,000$ PSI

STEEL H-PILES: ----- $f_y = 36,000$ PSI


SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-0100	1241	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (411)
500-2100	576	LF	CONCRETE BARRIER
500-3002	160	CY	CLASS AA CONCRETE
507-9003	758	LF	PSC BEAMS, AASHTO TYPE III, BR NO - 1
507-9033	697	LF	PSC BEAMS, AASHTO, BULB TEE, 74 IN, BR NO - 1
511-1000	26870	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (93658)
520-0573	7	EA	H-PILE POINTS, HP 14 X 73
520-1147	510	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
524-0010	116	LF	DRILLED CAISSON - 54 IN
540-1101	LUMP	LS	REMOVAL OF EXISTING BR, STA NO - 27+00
603-2024	1035	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	1035	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 1



3340 PEACHTREE RD. NE
SUITE 2400, TOWER PLACE 100
ATLANTA, GA 30326-1001



Heath & Lineback Engineers
INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066-5393
(770)424-1668

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

GENERAL NOTES
SR 372 OVER ETOWAH RIVER
CHEROKEE COUNTY BRST0-I022-00(010)

NO SCALE MAY 2013

DESIGNED JRL/KAK
DRAWN JRL

CHECKED GBL / MS
DESIGN GROUP EJC

REVIEWED WMD/DLC
APPROVED BFR

DRAWING NO. 35 - 002
BRIDGE SHEET 2 OF 14

REVISIONS	DATE
BY	DATE
SC	REV. TO 2013 SPECS 5-30-2014

1 INCH WHEN PRINTED FULL SIZE